Date: Tuesday, 3/20/2007 1:51:27 PM
User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 212/205 HIGH AFT X-TUBE ASSEMBLY
Job Number	: 31363		
Estimate Number	: 10257		
P.O. Number	: N/A	Part Number	: D212664201
This Issue	: 3/20/2007 S.O. No. : N/A	Drawing Number	: D212-664-241 REV B
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : LANDING GEAR	Drawing Revision	: B
Previous Run	: 31362	Material	: N/A
Written By	:	Due Date	: 4/15/2007 Qty: 1 Um: Each
Checked & Approved By	: 07.03.20		
Comment	: Est Rev:E 04.02.16 Reformat K/DS Est Rev:F 06-03-29 Remove Coments on Pick List JLM		

Additional Product

Job Number:

Seq. #:	Machine Or Operation:	Description :
1.0	DC	DOCUMENT CONTROL

KJ 07.05.04

Comment: DOCUMENT CONTROL
Photocopy bluefile and create labels as per PPP D212-664-201CHG002 003 Magna band

2.0	D6006129	Crosstube material

Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
Pick:
Qty Part number Description Batch
1 D6006-129 Crosstube 25666
Check OD = 3.250"; ID = 2.220"

SF 07/04/13

3.0	MORI SEIKI	MORI SEIKI CNC LATHE LARGE

Comment: MORI SEIKI CNC LATHE LARGE

1-Fill tube with sand & install plugs DT8534 on both ends as per Folio FA114

2-Turn first side as per Folio FA114

3-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D212-664-241. SF 07/04/13

4.0	QC1	INSPECT ALL DIM TO DIM SHEET

Comment: INSPECT ALL DIM TO DIM SHEET MS 07/04/14

Form: rprocess

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** _________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

QA: N/C Closed: _____ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 3/20/2007 1:51:27 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services **Drawing Name:** 212/205 HIGH AFT X-TUBE ASSEMBLY

Job Number: 31363 **Part Number:** D212664201

Job Number:

Seq. #:	Machine Or Operation:	Description :
5.0	MORI SEIKI	MORI SEIKI CNC LATHE LARGE

Comment: MORI SEIKI CNC LATHE LARGE

1-Turn second side as per Folio FA114

2-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D212-664-241. MS 07/04/15 /

Seq. #:	Machine Or Operation:	Description :
6.0	QC1	INSPECT ALL DIM TO DIM SHEET

Comment: INSPECT ALL DIM TO DIM SHEET MS 07/04/15 |

Seq. #:	Machine Or Operation:	Description :
7.0	QC8	SECOND CHECK

Comment: SECOND CHECK [illegible] 07-04-16 (1)

Seq. #:	Machine Or Operation:	Description :
8.0	MORI SEIKI	MORI SEIKI CNC LATHE LARGE

Comment: MORI SEIKI CNC LATHE LARGE

1-Remove sand and plugs

2-Scribe part # and batch # using vibrating stylus as per Dwg D212-664-241 MS 07/04/15 /

Seq. #:	Machine Or Operation:	Description :
9.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1

Comment: LANDING GEAR RESOURCE 1

1-Polish entire outside surface of crosstube EL 7/4/16

Seq. #:	Machine Or Operation:	Description :
10.0	QC5	INSPECT WORK TO CURRENT STEP

Comment: INSPECT WORK TO CURRENT STEP DP 7-4-16

Seq. #:	Machine Or Operation:	Description :
11.0	HAND FINISHING1	HAND FINISHING RESOURCE #1

Comment: HAND FINISHING RESOURCE #1
Chemical Conversion Coat as per QSI 005 4.1 within 24 hours of machining JD 7-4-17

 Form: rprocess

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ______________ **PAR #:** _______ **Fault Category:** ______________ **NCR:** Yes No **DQA:** _____ **Date:** _________

QA: N/C Closed: _____ **Date:** _________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 3/20/2007 1:51:28 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services **Drawing Name:** 212/205 HIGH AFT X-TUBE ASSEMBLY

Job Number: 31363 **Part Number:** D212664201

Job Number:

Seq. #:	Machine Or Operation:	Description :
12.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP	DP 7-4-18
13.0	BENDING	BENDING MACHINE
	Comment: BENDING MACHINE Bend tube as per Dwg D212-664-241 using CNC bender program 212-af and Folio FT007	EL 7-4-19
14.0	QC15	DIMENSIONAL CHECK OF X-TUBES
	Comment: DIMENSIONAL CHECK OF X-TUBES	J 070425
15.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
	Comment: LANDING GEAR RESOURCE 1 1-Drill pilot holes in tube as per Dwg D212-664-241 using drill Jig DT8550 & DT8551 2-Ream hole to finish size in tube as per Dwg D212-664-241using drill Jig DT8550 & DT8551.Check dimensions between holes, both sides on both cuffs, to ensure alignment with saddle holes. 3-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D212-664-241	RT 07-04-26 JB 7-4-27
16.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
	Comment: HAND FINISHING RESOURCE #1 Chemical Conversion Coat as per QSI 005 4.1 within 24 hours of bending and drilling	JB 7-4-27
17.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
	Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION	J 070504
18.0	QC5	INSPECT WORK TO CURRENT STEP
	Comment: INSPECT WORK TO CURRENT STEP	J 070504 LPI
19.0	OUTSIDE SERVICE	OUTSIDE SERVICES
	Comment: Sub-Contracting OUTSIDE SERVICES Liquid Penetrant Inspection as per QSI 038 Issue P/O: 8700 LPI as per ASTM 1417 Level 2	C 070504

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ________________ PAR #: _______ Fault Category: ________________ NCR: Yes No DQA: _____ Date: _________

QA: N/C Closed: _____ Date: _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
			Corrective Action Section B					
DATE	STEP	Description of NC Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Approval Chief Eng	Approval QC Inspector

NOTE: Date & initial all entries

H:\fFORMS\Quality Assurance\approved QA\NCRWO RevD

Date: Tuesday, 3/20/2007 1:51:28 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services
Drawing Name: 212/205 HIGH AFT X-TUBE ASSEMBLY

Job Number: 31363
Part Number: D212664201

Job Number:

Seq. #:	Machine Or Operation:	Description :
	Attach copy of NDT results to work order	
20.0	PACKAGING 1	PACKAGING RESOURCE #1

Comment: PACKAGING RESOURCE #1
Inspect for transit damageEnsure copy of NDT results attached to work order. CO 7/5/10

21.0	QC5	INSPECT WORK TO CURRENT STEP

07-05-14 ⓓ

Comment: DIMENSIONAL CHECK
Inspect for damage & ensure results are as per Dwg D212-664-241

22.0	SPRAY PAINTING	SPRAY PAINTING

Comment: SPRAY PAINTING

1-Prime inside and outside crosstube as per QSI 005 4.2

2-Paint outside crosstube with White Imron as per QSI 005 4.2

} RT 07-05-22

23.0	QC14	Inspect Spray Paint

07-05-23 ⓓ

Comment: Inspect Spray Paint
Then,Wrap in plastic bag to protect from scratches

24.0	D2856600	Abrasion Strip

Comment: Qty.: 0.8400 f(s)/Unit Total : 0.8400 f(s)
Pick:

Qty	Part number	Description	Batch
2	D2856-600-1009	Abrasion Strip	N/A magnabond B103628

25.0	D29401	Support

Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
Pick:

Qty	Part number	Description	Batch
2	D2940-1	Support	24367 RT 07-05-24

 Form: mprocess

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: ____________ **PAR #:** ______ **Fault Category:** ____________ **NCR:** Yes No **DQA:** _____ **Date:** ________

QA: N/C Closed: _____ **Date:** ________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Date: Tuesday, 3/20/2007 1:51:28 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services
Drawing Name: 212/205 HIGH AFT X-TUBE ASSEMBLY

Job Number: 31363
Part Number: D212664201

Job Number:

Seq. #:	Machine Or Operation:	Description :
26.0	MS2192028	Clamp(per MIL-DTL-8783C)

Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)
Pick:
Qty Part number Description Batch
4 MS21920-28 Clamp 103896 RT 07-05-24

Seq. #:	Machine Or Operation:	Description :
27.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1

Comment: LANDING GEAR RESOURCE 1

1-Install abrasion strips as per QSI 035 using DT8582

2-Install supports and clamps as per Dwg D212-664-241. Torque clamps to 80-100 in lb. } RT 07 05 24

Seq. #:	Machine Or Operation:	Description :
28.0	QC5	INSPECT WORK TO CURRENT STEP

Comment: INSPECT WORK TO CURRENT STEP

Seq. #:	Machine Or Operation:	Description :
29.0	PACKAGING 1	PACKAGING RESOURCE #1

Comment: PACKAGING RESOURCE #1
Pick Packing Kit

Seq. #:	Machine Or Operation:	Description :
30.0	D34281	Placard

Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
Placard
Batch: B26249 ✓

Seq. #:	Machine Or Operation:	Description :
31.0	AN640A	Bolt

Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)
Bolt
Batch: M103446 ✓

Seq. #:	Machine Or Operation:	Description :
32.0	AN641A	Bolt

Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)
Bolt
Batch: M101428 ✓

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________ PAR #: ______ Fault Category: ____________ NCR: Yes (No) DQA: [illegible] Date: 07/05/25

QA: N/C Closed: _____ Date: ________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 3/20/2007 1:51:28 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 212/205 HIGH AFT X-TUBE ASSEMBLY

Job Number: 31363

Part Number: D212664201

Job Number:

Seq. #:	Machine Or Operation:	Description :
33.0	AN960JD616	Washer
	Comment: Qty.: 18.0000 Each(s)/Unit Total : 18.0000 Each(s) Washer Batch: M103641	
34.0	MS21042L6	Nut
	Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s) Nut Batch: M101660	
35.0	QC4	INSPECT 100% KITS FOR COMPLETENESS
	Comment: INSPECT 100% KITS FOR COMPLETENESS	
36.0	PACKAGING 1	PACKAGING RESOURCE #1
	Comment: HAND FINISHING RESOURCE #1 Identify and pack for shipping as per PPP D212-664-201	
37.0	QC21	FINAL INSPECTION/W/O RELEASE
	Comment: FINAL INSPECTION/W/O RELEASE	

Job Completion

Form: rprocess

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ______________________ **PAR #:** _______ **Fault Category:** ___________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

QA: N/C Closed: _____ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	31363
Description: Crosstube Assembly (205/212 High Aft)	Part Number:	D212-664-241
Inspection Dwg: D212-664-241 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [ ] Prototype

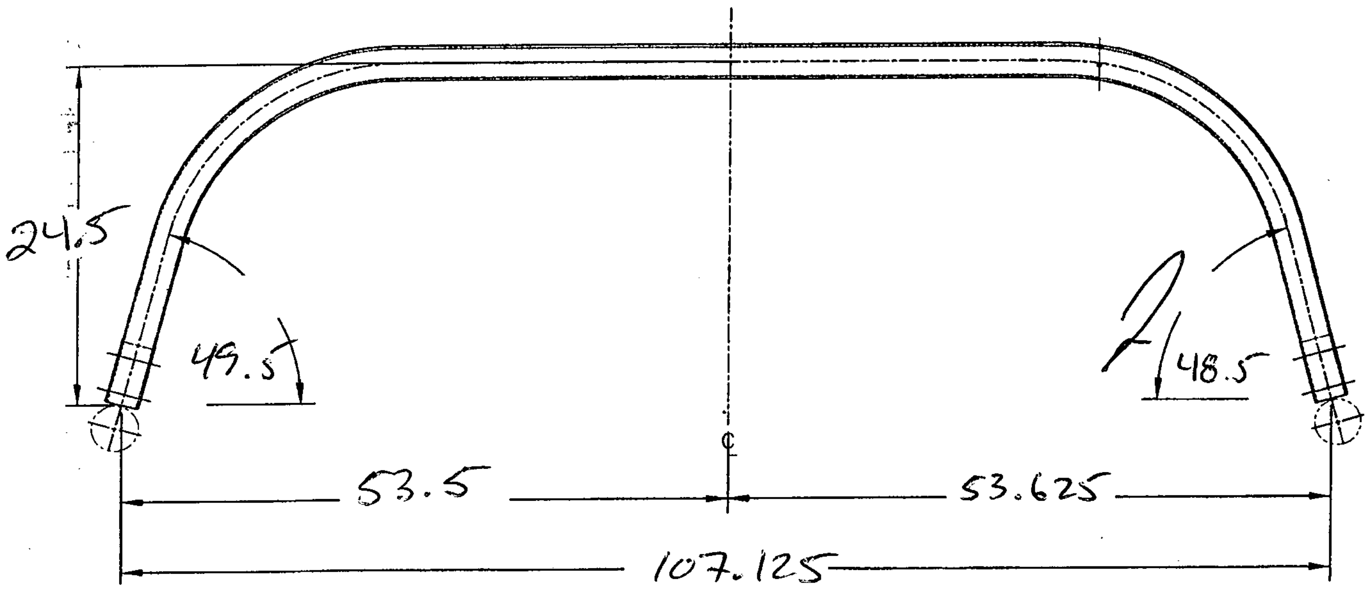
	Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	0.200	+/-0.010	.200	✓			
	R0.063	+/-0.010	.063	✓			
	2.990	+0.005/-0.000	2.993	✓			
	5.237	+/-0.030	5.240	✓			
	2.600	+0.005/-0.000	2.603	✓			
	2.686	+0.005/-0.000	2.690	✓			
	2.770	+0.005/-0.000	2.773	✓			
	2.854	+0.005/-0.000	2.858	✓			
	2.938	+0.005/-0.000	2.941	✓			
	3.021	+0.005/-0.000	3.024	✓			
	3.133	+0.005/-0.000	3.136	✓			
	3.179	+0.005/-0.000	3.182	✓			
SIDE B	0.200	+/-0.010	.200	✓			
	R0.063	+/-0.010	.063	✓			
	2.990	+0.005/-0.000	2.993	✓			
	5.237	+/-0.030	5.240	✓			
	2.600	+0.005/-0.000	2.603	✓			
	2.686	+0.005/-0.000	2.689	✓			
	2.770	+0.005/-0.000	2.773	✓			
	2.854	+0.005/-0.000	2.858	✓			
	2.938	+0.005/-0.000	2.941	✓			
	3.021	+0.005/-0.000	3.025	✓			
	3.133	+0.005/-0.000	3.136	✓			
	3.179	+0.005/-0.000	3.181	✓			
	124.36	+/-0.020	124.36	✓			

Measured by:	S.B	Audited by:	BG	Prototype Approval:	N/A
Date:	07/04/13	Date:	07.04.16	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	05.04.27	New Issue (P/O D412-664-201)	KJ/JLM	
B	06.03.09	Tolerance for 5.237 was +/-0.001	KJ/JLM	

DART AEROSPACE LTD	Work Order:	31363
Description: Crosstube High Aft (205/212)	Part Number:	D212-664-201
Inspection Dwg: D212-664-241 Rev: B		Page 1 of 1

Required Dimension	Min	Max
Height	24.24	24.36
1/2 Span	53.66	53.78
Angle	49	52
Total Span	107.32	107.56



Comments
Tube is high by .200" from nominal, &
.075 out of QS1042. See David approval
on attached e-mail.

QC15 Inspection	QS1042
Date	07.05.01

Rev	Date	Change	Revised by	Approved
A	07.02.06	New Issue	KJ/JM	

DART

QA COPY ISSUED

DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D212-664-241 REV. B SHEET 1 OF 3
DATE 05.02.04		TITLE CROSSTUBE ASS'Y (205/212 HI AFT) SCALE NTS

A	00.12.12	NEW ISSUE
B	05.02.04	ADD HOLES FOR COMPATABILITY WITH BHT/AA SKIDTUBES

RELEASED 05.06.09

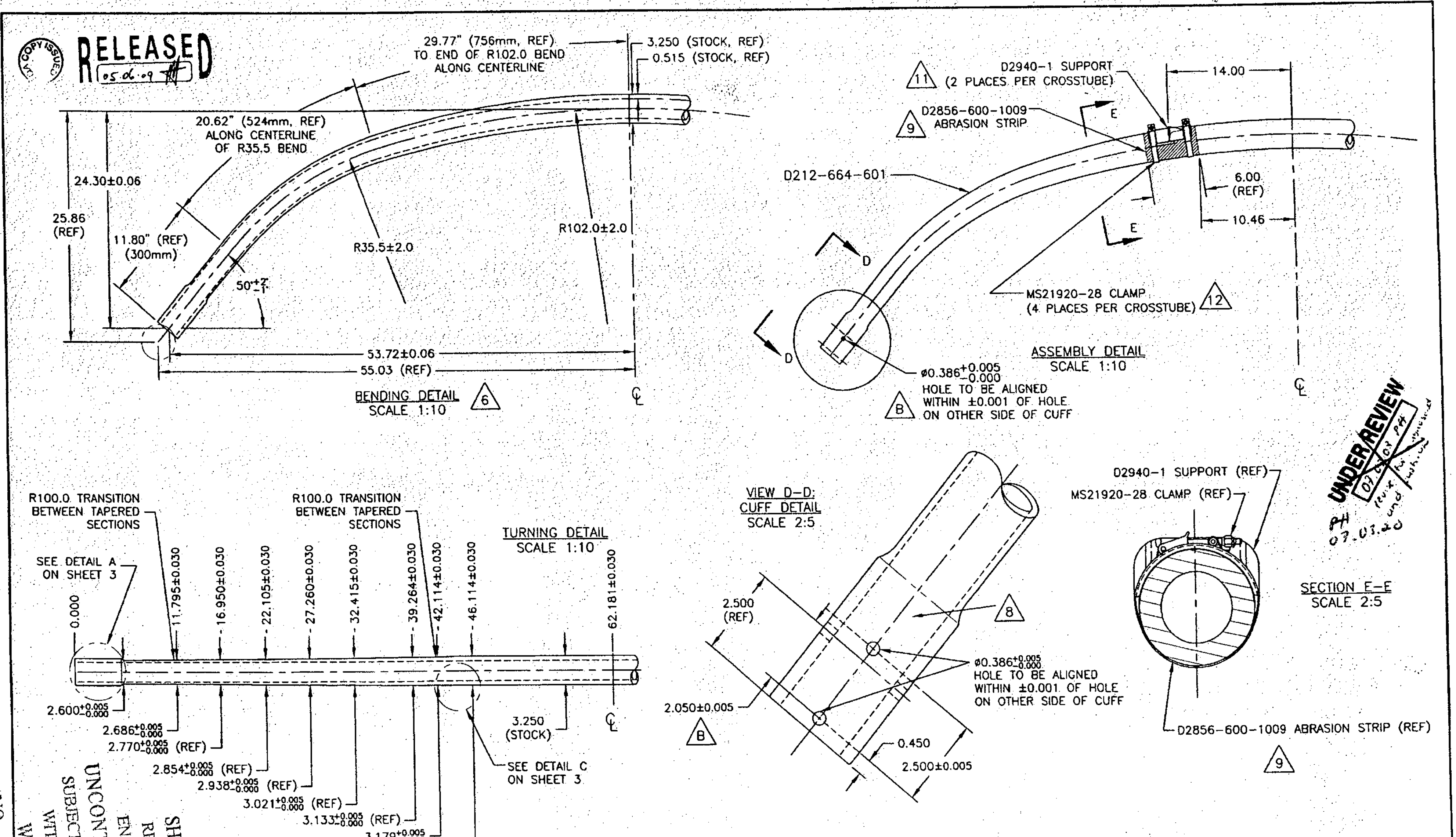
PH 07.03.20
UNDER REVIEW 07.03.03 PH
revise to add mugaboard and cushion

Qty	Part Number	Description
X	D212-664-241	CROSSTUBE ASSEMBLY (205/212 HIGH AFT)
1	D6006-129	CROSSTUBE
2	D2940-1	SUPPORT
2	D2856-600-1009	ABRASION STRIP
4	MS21920-28	CLAMP

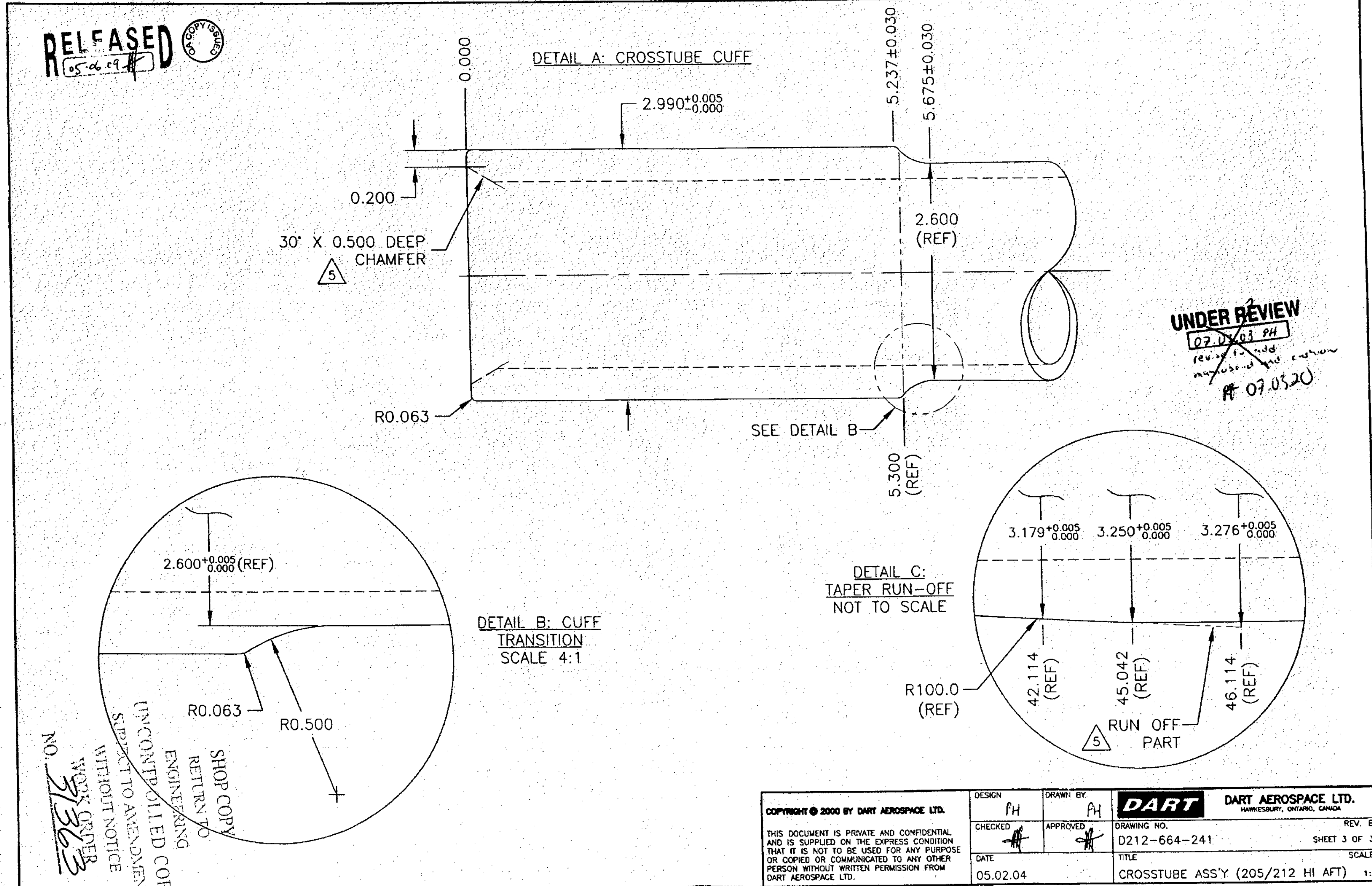
GENERAL NOTES:

1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
2) MATERIAL: MANUFACTURED FROM D6006-129
   FINISHED LENGTH = 124.36±0.020
3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
   PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
   PAINT OUTSIDE PER DART QSI 005 4.2
4) PART IS SYMMETRIC ABOUT CENTERLINE
5) RUN-OFF PART. BLEND OUT EDGE LONGITUDINALY, TRANSITION SHOULD BE SMOOTH.
6) BEND PROGRESSIVELY WITH A MINIMUM OF 5 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
7) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
8) SCRIBE DART PART NUMBER AND BATCH NUMBER IN THIS AREA WITH VIBRATING STYLUS.
9) INSTALL D2856-600-1009 ABRASION STRIP WITH A 0.13 (REF) GAP ON BOTTOM SIDE OF CROSSTUBE, CENTERED OPPOSITE D2940-1 SUPPORT, PER QSI 035.
10) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
11) IT IS OPTIONAL TO SEAL EDGES OF SUPPORTS AND ABRASION STRIP USING SIKAFLEX-241/291 SEALANT.
12) TORQUE CLAMPS 80 TO 100 IN-LB.

SHOP COPY RETURN TO ENGINEERING
UNCONTROLLED COPY SUBJECT TO AMENDMENT WITHOUT NOTICE
WORK ORDER NO. 31363



DESIGN	DRAWN BY	DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA
PH	PH	DRAWING NO. D212-664-241 REV. B SHEET 2 OF 3
CHECKED	APPROVED	
DATE 05.02.04		TITLE CROSSTUBE ASS'Y (205/212 HI AFT) SCALE 1:10



DESIGN	DRAWN BY	DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA
PH	PH	
CHECKED	APPROVED	DRAWING NO. D212-664-241 — REV. B — SHEET 3 OF 3
DATE 05.02.04		TITLE CROSSTUBE ASS'Y (205/212 HI AFT) — SCALE 1:1

L Lacelle

From: David Shepherd [dshepherd@dartaero.com]
Sent: April 26, 2007 10:38 AM
To: 'Jason Murdoch'
Cc: 'L Lacelle'
Subject: FW: Drawings
Importance: High
Attachments: Drawing 001.jpg; Drawing 002.jpg; Drawing.jpg

B31360 is acceptable as is.
B31363 is acceptable as is.
With respect to B31040, I agree it is acceptable to move the holes up the cuff and trim the bottom off the cuff, if necessary. Drill holes with jigs pushed right up and check with a saddle for clearance.

David

From: Jason Murdoch [mailto:jmurdoch@dartaero.com]
Sent: Wednesday, April 25, 2007 9:02 AM
To: 'David Shepherd'
Subject: FW: Drawings
Importance: High

Hi Dave, we have a couple of tubes that are high, and out of my tolerance. The one that concerns me the most is the D407. Can we compensate for the height by drilling up higher on the cuff without interfering with the tube and saddle fit, and maybe remove some of the bottom of the cuff if necessary? The 407 fits not bad at all in the jig, other than being too high, and a tad narrow.
What are your thoughts on the 212's? I think these aren't that bad, just high. The 212's fit good in the table jig. If it's possible, I would like a response today, because I'm leaving for 5 days, thatnks.

jmurdoch@dartaero.com
Q.C. COORDINATOR

From: Brigitte Golden [mailto:bgolden@dartaero.com]
Sent: Wednesday, April 25, 2007 10:33 AM
To: 'Jason Murdoch'
Subject: Drawings

Brigitte Golden
Order Processing
Dart AerospaceLtd.

HeathAir
INTERNATIONAL (1991) INC.
681 Ave. Lepine, Dorval, Québec H9P 1G3
Tél.: (514) 636-1000 • Fax: (514) 636-0031

W.O. Nº 36318

A.M.O. Number: 46/90

NON-DESTRUCTIVE TESTING REPORT

AIRCRAFT / COMPONENT INFORMATION

REGISTRATION: MODEL/TYPE: SERIAL NUMBER:

TOTAL HR/LDG: OPERATED BY: BASED AT:

INSPECTION REQUIREMENTS

Carry out FPI of (8) cross tube (external surface) as per ASTM E-1417-05 and the Dart QSI 038, Section 4.1.1 (on file at client) - parts delivered to HeathAir.
Qty (4) P/N D212-664-201 S/N's B31363, B31359, B30422 & B31362.
Qty (4) P/N D212-664-101 S/N's B30418, B30416, B30194 & B30193.

☐ RADIOGRAPHY ☐ ULTRASONIC ☑ PENETRANT ☐ MAGNETIC PARTICLE ☐ EDDY CURRENT

INSPECTION REPORT

Fluorescent penetrant inspection was performed in accordance with the above requirements on (8) cross tubes.
Note: A Level 3 penetrant was substituted for the requested Level 2 (3 is more sensitive)
Ardrox 970P25E Batch #04B503.
(8) cross tubes PASSED inspection.

THE MAINTENANCE DESCRIBED ABOVE HAS BEEN PERFORMED IN ACCORDANCE WITH THE APPLICABLE STANDARDS OF AIRWORTHINESS

INSPECTED BY: S. FLETCHER

DATE May 8, 2007

INSPECTION STAMP(S) Not Required

CUSTOMER INFORMATION

CUSTOMER: Dart Aerospace

P.O. NUMBER 00003700

ADDRESS:

CONTACT NAME:

LABOUR	@	$
MATERIALS	@	
TRAVEL EXPENSES	@	GST
HOTEL EXPENSES	@	PST

INVOICE NO. TOTAL $

WHITE COPY – INSPECTION FILE • YELLOW COPY – CUSTOMER • PINK COPY – ACCOUNTANT

DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D212-664-241 REV. C SHEET 1 OF 3
DATE 07.03.08		TITLE CROSSTUBE ASS'Y (205/212 HI AFT) SCALE NTS

DART

RELEASED 07.04.24 PER ECN 089

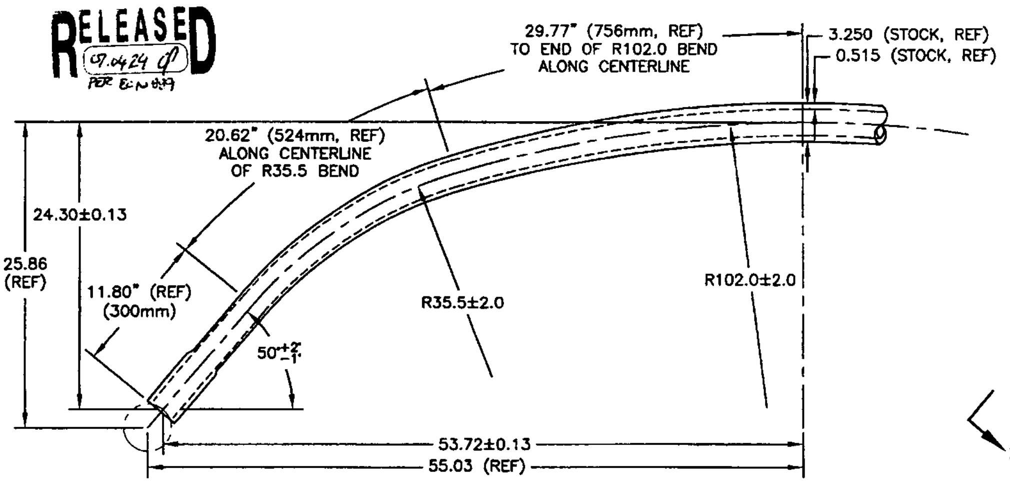
Rev	Date	Description
A	00.12.12	NEW ISSUE
B	05.02.04	ADD HOLES FOR COMPATABILITY WITH BHT/AA SKIDTUBES
C	07.03.08	REMOVE -1009 ABRASION STRIP; ADD MAGNOBOND 6398, CUSHION, REVERSE CLAMPS

Qty	Part Number	Description
X	D212-664-241	CROSSTUBE ASSEMBLY (205/212 HIGH AFT)
1	D6006-129	CROSSTUBE
2	D2940-1	SUPPORT
4	D3595-063-530	RUBBER CUSHION
4	MS21920-28	CLAMP (OR MS21920-30)
A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)

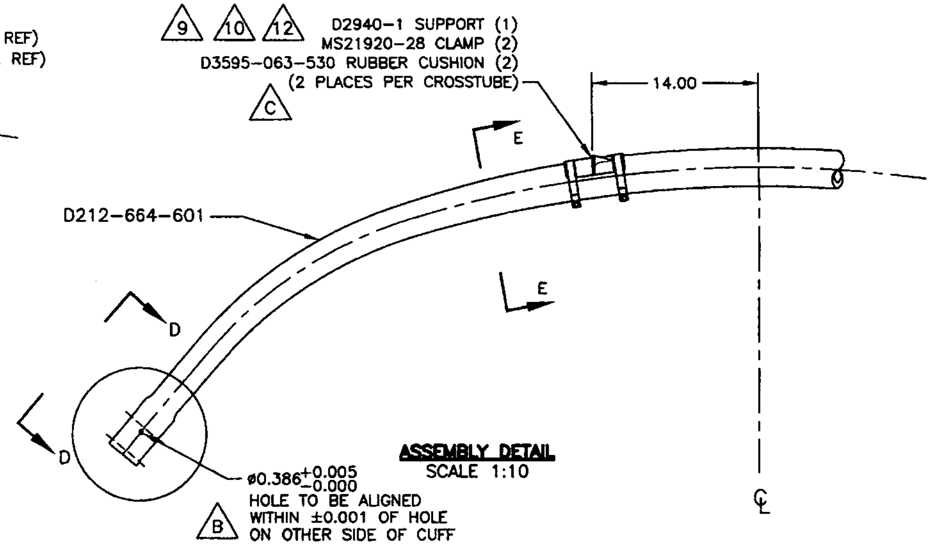
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GENERAL NOTES:

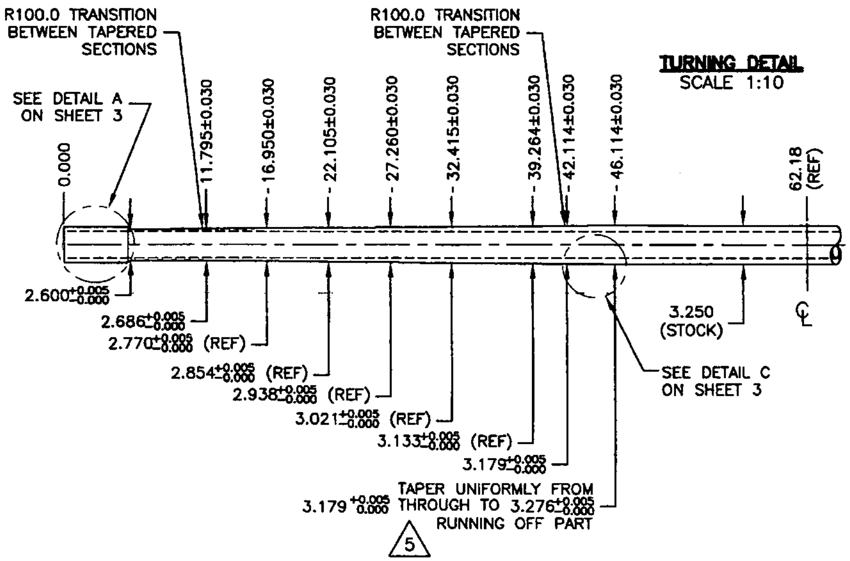
1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
2) MATERIAL: MANUFACTURED FROM D6006-129
   FINISHED LENGTH = 124.36±0.020
3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
   PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
   PAINT OUTSIDE PER DART QSI 005 4.2
4) PART IS SYMMETRIC ABOUT CENTERLINE
5) RUN-OFF PART. BLEND OUT EDGE LONGITUDINALY, TRANSITION SHOULD BE SMOOTH.
6) BEND PROGRESSIVELY WITH A MINIMUM OF 5 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
7) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
8) SCRIBE DART PART NUMBER AND BATCH NUMBER IN THIS AREA WITH VIBRATING STYLUS.
9) INSTALL D2940-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
10) INSTALL MS21920-28 CLAMPS WITH D3595-063-530 RUBBER CUSHIONS TO SECURE D2940-1 SUPPORT ON TOP SIDE OF CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE OF CROSSTUBE SUPPORT
    NOTE: MS21920-30 CLAMPS CAN BE USED TO ACCOMMODATE VARYING DIAMETERS. ENSURE THERE IS A MINIMUM OF 1.5 THREADS IN SAFETY ON THE NUTS.
11) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
12) TORQUE CLAMPS 80 TO 100 IN-LB.



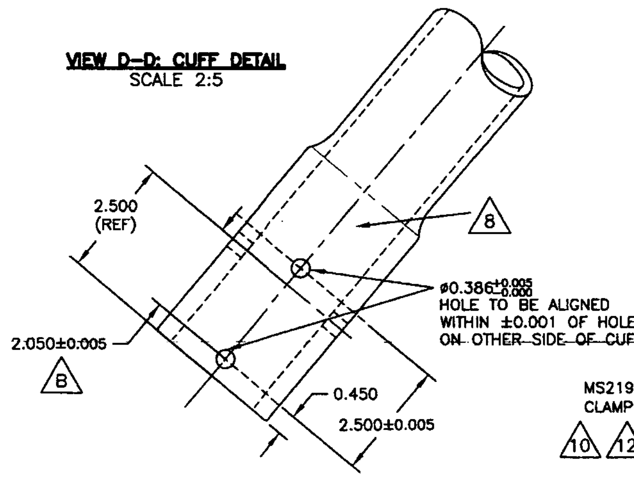
BENDING DETAIL 6
SCALE 1:10



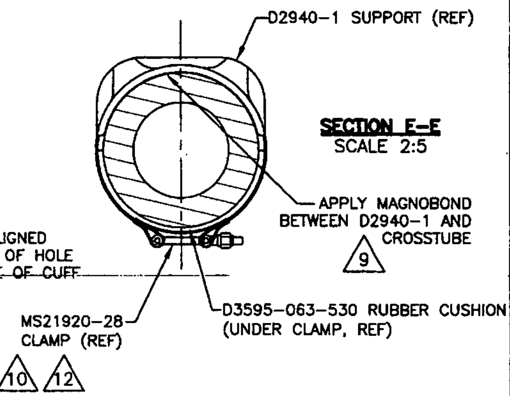
ASSEMBLY DETAIL
SCALE 1:10



TURNING DETAIL
SCALE 1:10

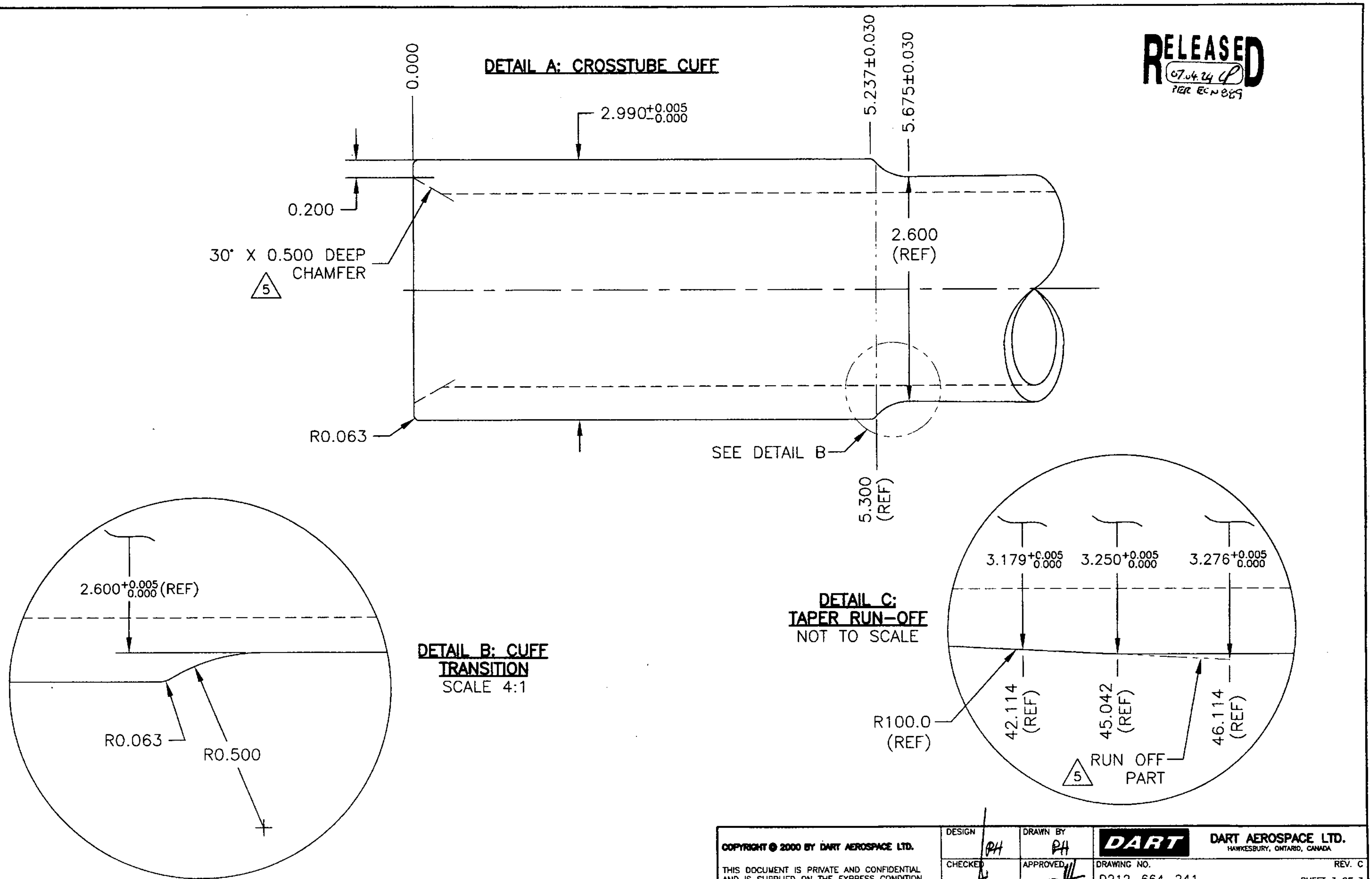


VIEW D–D: CUFF DETAIL
SCALE 2:5



SECTION E–E
SCALE 2:5

DESIGN	DRAWN BY	DART — DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA
PH	PH	
CHECKED	APPROVED	DRAWING NO. D212-664-241 — REV. C — SHEET 2 OF 3
DATE 07.03.08		TITLE CROSSTUBE ASS'Y (205/212 HI AFT) — SCALE 1:10



DESIGN	DRAWN BY	DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA
PH	PH	
CHECKED	APPROVED	DRAWING NO. D212-664-241 — REV. C — SHEET 3 OF 3
DATE 07.03.08		TITLE CROSSTUBE ASS'Y (205/212 HI AFT) — SCALE 1:1